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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,705

10/18/2005

Kouki Hatsuda

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OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

HARRIS, GARY D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

09/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,705	<b>Applicant(s)</b> HATSUDA ET AL.	
	<b>Examiner</b> GARY D. HARRIS	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 and 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 5/27/2008 pages 8 have been fully considered but they are not persuasive. Applicant argues that the liquid absorbing resin capable of absorbing an electrolyte solution and shows adhesion is not suggested by Hori. The Hori invention is capable of absorbing electrolyte solution and has an adhesive property. Applicant is not claiming a product that cannot be washed away with water. Additionally, Inagaki et al. '197 (from the first rejection) utilizes various electrolyte absorbing materials similar to applicant, but does not disclose various combinations of monomers. The Hori reference illustrates that the polyfunctional monomer components are known and would be obvious to optimize. Examiner is continuing prosecution as Claims 13-15 were inadvertently not examined.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7, 8, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagaki et al. US 6,696,197 in view of Hori et al. 5,663,261.

As to Claim 1, Inagaki et al. '197 discloses a liquid absorbing polymeric material formed into a sheet designed to absorb electrolyte (Col. 13, Line 62-67) utilizing polyethyl acrylate and other copolymer and monomer units or a plurality of different kinds of materials can be used for forming the electrolyte absorbing sheet in order to optimize liquid absorption (Col. 14, Line 1-18). Inagaki et al. '197 does not disclose that the liquid absorbing sheet utilizing a monofunctioning monomer and a polyfunctioning monomer components as claimed by applicant. However, Hori et al. '261 discloses a polymer comprising a monofunctioning monomer component formula 1 (Col. 2, Line 11-18) and formula 4 (Col. 2, Line 50-55). Examiner interprets formula 2 as the amide bond containing acrylic (Col. 2, Line 24-30) and formula 3 (Col. 2, Line 37-43) as a polyfunctioning monomer R6 being an alkylene group which would have a different reactive site than the vinyl group (Col. 2, Line 5-50). The reference discloses a film which the examiner interprets as a sheet which would be capable of absorbing a liquid. The nonaqueous electrolyte solution is an intended use that doesn't further limit the claim. It would be obvious to one skilled in the art to optimize the Inigaki et al. '197 by utilizing Hori et al. '261 in order to optimize liquid absorption.

As to Claim 2, Inagaki et al. '197 discloses the use of acrylics and polyethylene but does not quote the polyethylene glycol acrylate monomer is phenoxyethylene glycol acrylate or methoxyethylene glycol acrylate. Hori et al. '261 discloses the use of phenoxyethylene glycol mono(meth)acrylate (Col. 3, Line 47-48). It would have been obvious to utilize Hori et al. '261 film to optimize absorption similar to claim 1.

As to Claim 3, Inagaki et al. '197 discloses the use of acrylics and mixtures thereof. Inagaki et al. '197 does not specifically disclose amide bond-containing monomer is acryloylmorpholine or N,N-diethylacrylamide. However, dimethylacrylamides are well known water-soluble copolymers as disclosed by Hori et (Col. 3, Line 14-50).

As to Claim 4, 7 & 8, Inagaki et al. '197 discloses the desirability for the laminate film to be on a metal layer (substrate) (Col. 10, Line 25-26).

As to Claim 5, Inagaki et al. '197 discloses an electrolyte-absorbing sheet arranged between the heat conductive sheet (substrate) and the secondary battery unit (Col. 4, Line 52-55).

As to Claim 13, Inagaka discloses the desirability to use carbonates (Col. 14, Lines 7-18).

As to Claim 14 & 15, Inagaki et al. '197 discloses the performance of different electrolyte absorbing materials (see table 3, col. 21, line 40-56) but does not disclose the amount of bonding between the monomers or the cross link density. The amount of bonding between monomers and the cross link density would be considered a product by process. The patentability of a product is independent of how it was made. Ex parte Jungfer 18 USPQ 1796, 1800 (BPAI 1991); Bristol-Myers Co. v. U.S. International Trade Commission 15 USPQ 2d 1258 (Fed. Cir. 1989). The burden is on applicants to show product differences in product by process claims. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113.

***Allowable Subject Matter***

Claims 6 & 9-12 are allowed. The following is a statement of reasons for the indication of allowable subject matter: Claims are allowed for reasons set forth in action dated 12/28/2007 (see page 3), attorney arguments regarding Hori US 5,663,261 (see interview summary dated 5/12/2008) and the specificity of the absorbent material used for the battery case. Specifically the nonaqueous electrolyte solution utilized with a nonaqueous electrolyte battery pack further describes the claim.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to GARY D. HARRIS whose telephone number is (571)272-6508. The examiner can normally be reached on 8AM - 5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary D. Harris/  
Examiner, Art Unit 1794

/Carol Chaney/  
Supervisory Patent Examiner, Art Unit 1794

<b>Application Number</b> 	<b>Application/Control No.</b>	<b>Applicant(s)/Patent under Reexamination</b>	
	10/553,705	HATSUDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	GARY D. HARRIS	1794	